

REMARKS

Claims 1, 13, 18, 57, 61, 87-88, 103, 112, 130, 149, and 158-206, are pending in this application upon entry of this amendment. Claims 158-206 have been added and do not contain new matter.

Reconsideration and allowance of all claims are respectfully requested in view of the following remarks.

Amendments to the Specification

The Applicants have made amendments to the specification to correct for grammatical errors and to further clarify Figs. 3A and 3B as originally filed. No new matter has been entered.

Allowed Claims

The Applicants thank the Examiner for indicating the allowance of Claims 57 and 61.

New Claims 158-192 should also stand allowed as they depend directly or indirectly from Claim 57.

Claim Rejections

Claims 1, 87-88 and 112 are rejected under 35 U.S.C. §102(e) as being anticipated by Grier et al. (U.S. Patent No. 6,416,190). Claims 1, 88 and 112 are rejected under 35 U.S.C. §103(a) as being unpatentable over Grier et al. (U.S. Patent No. 6,055,106) in view of Visscher et al. (IEEE Journal). Claims 13 and 18 are rejected under 35 U.S.C. §103(a) as being unpatentable over Grier et al. (U.S. Patent No. 6,055,106) in view of Visscher et al. as applied to Claims 1, 88 and 112 above and further in view of Ulmer et al. (U.S. Patent No. 5,776,674).

For the following reasons, the prior art rejections are respectfully traversed.

With respect to the rejection of Claims 1, 87, and 88, over Grier et al. individually, and Grier et al. and Visscher et al. in combination, the Applicants respectfully submit that neither of the references, individually or in combination, teaches or suggests a method of configuring and tracking an array of probes including selecting at least two of the probes for inclusion in an array of probes contained within

the optical traps based on predetermined binding and reactivity characteristics of the probes; trapping each of the selected probes having said predetermined binding and reactivity characteristics with a corresponding one of the optical traps to configure the array of probes contained within the optical traps; and, tracking a position of at least one of the trapped probes in the array by computerized monitoring of the position of the optical trap which contains it, as recited in amended Claim 1, and as substantially recited in amended Claims 87 and 88.

Rather, both Grier et al. and Visscher et al. are silent with respect to this feature. Grier et al. do not disclose or suggest trapping probes based on their predetermined binding and reactivity characteristics. Further, Visscher et al. disclose only various methods of determining trap stiffness, and do not teach or suggest trapping probes based on their binding and reactivity characteristics.

Accordingly, Claims 1, 87, and 88 are neither anticipated by, nor obvious over either the individual or the combination of the Grier et al. and Visscher et al. references, and the rejection of Claims 1, 87, and 88, under 35 U.S.C. 102(b) or 103 should be withdrawn.

Further, since Claim 112 depends from Claim 1, it is also patentably distinguishable over Grier et al. and Visscher et al. for the reasons cited above with respect to Claim 1.

With respect to Ulmer et al., this reference is directed to coupled particles/probes, which are applied to a thin film in a first droplet, and then moved to a second droplet, to determine if the probe is capable of binding with a specific DNA fragment. However, this is completely different from selected and trapping probes for an array based on their predetermined binding and reactivity characteristics.

Thus, with respect to the rejection of Claims 13 and 18, the Applicants respectfully submit that the addition of Ulmer et al. does not make up for the deficiencies in Grier et al. and Visscher et al. Accordingly, Claims 13 and 18 are patentable over the applied prior art.

New Claims 158-206 have been added. Since Claims 13, 18, and 112, depend from Claim 1, Claims 61, and 158-192 depend from Claim 57, and Claims 193-206 depend from Claim 88, they are also

patentably distinguishable over the applied prior art for the reasons cited above with respect to Claims 1, 57, and 88, respectively.

If the Examiner believes that there is any issue which could be resolved by a telephone or personal interview, the Examiner is respectfully requested to contact the undersigned attorney at the telephone number listed below.

Applicants hereby petition for any extension of time which may be required to maintain the pendency of this case, and any required fee for such an extension is to be charged to Deposit Account No. 50-0951.

Respectfully submitted,

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